

Abstract

- A method for monitoring the health of a system comprises performing at each of a plurality of times the steps of:
- 5       constructing a condition signature from a plurality of condition indicators including (a) a plurality of vibration measurements acquired from the system or (b) one or more vibration measurements and one or more performance parameter measurements acquired from the system;
  - 10      predicting a normal signature from a model defining one or more inter-dependencies between said condition indicators, the normal signature corresponding to the condition signature for a healthy system;
  - 15      comparing the condition signature with the normal signature; and
  - registering an event if the condition signature differs from the normal signature by more than a predetermined threshold.
- CONFIDENTIAL